

ABSTRACT

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A portable therapeutic device and method of use generate longitudinally propagating ultrasound and shear waves generated by such longitudinally propagating  
5 ultrasound to provide effective healing of wounds. A transducer having an operative surface is disposed substantially adjacent to the wound to emit ultrasound to propagate in the direction of the wound to promote healing. Reflections of the ultrasound by bone tissue, by skin  
10 layers, or by internally disposed reflective media propagate toward the wound as longitudinal waves, with shear waves generated by the longitudinal waves for the healing of the wound. A focusing element is used for focusing the propagation of the ultrasound at a predetermined angle  
15 toward the wound. The operative surface of the transducer may be annularly shaped to encircle the wound to convey the ultrasound and/or reflected ultrasound thereto. A housing may be provided for positioning the transducer near a portion of the skin near the wound, and for indenting the  
20 skin to form a cavity, with the transducer disposed in the cavity to emit the ultrasound toward an internal surface of the wound. Fixture structures, such as adjustable straps, may extend about a portion of the body to position the transducer near the wound.